

REMARKS

Applicants have reviewed the comments and rejections set forth by the Examiner in the Office Action dated November 29, 2005 and respectfully respond with the amendments above and the arguments set forth below. Claims 1-6 and 10 are pending in the above captioned matter. Claims 1 and 10 are amended herein. No new matter is added herein. Applicants respectfully request continuing examination in view of the above amendments and the following arguments.

CLAIM REJECTIONS

Claims 1-6 and 10 are rejected under 35 USC 103(a) over World Intellectual Property Organization (WIPO) Patent Cooperation Treaty (PCT) application publication no. WO 00/35013 by Kloen, et al. (hereinafter Kloen). Applicants have reviewed the reference cited and respectfully assert it does not teach or suggest the embodiments of the present invention as recited in Claims 1-6 and 10 for the following rationale.

As Applicants understand the reference, Kloen teaches an integrated circuit (IC) device wherein bond pads are disposed substantially over an active circuit. Kloen expressly teaches that a passivating layer therein "is composed of a polyimide" (Kloen, line 23 at page 1) or "[a]lternatively," ... a polyimide layer on top of a silicon nitride or a silica layer." (Id.) The teaching of Kloen thus differs from the embodiments of the present invention recited in Claims 1-6 and 10.

As amended herein, Claim 1 reads as shown below, with underlining added for emphasis.

1. A semiconductor structure comprising:
a pad area wherein said pad area comprises:
a substrate;
a first layer of metal disposed above said substrate wherein said active device is disposed below said first layer of metal;
a second layer of metal disposed above said first layer of metal;
a layer of dielectric disposed between said first metal layer and said second metal layer wherein said dielectric comprises tetraoxysilane;
a via disposed within said dielectric layer wherein said via electrically couples said first and said second metal layer; and
one or more subsequent layers of metal between said first and said second metal layers, wherein said via comprises one or more of a plurality of vias and wherein one or more of said vias electrically couples one or more of said subsequent layers with one or more of each other, said first and said second layers of metal; and
an active device of said semiconductor structure disposed below said pad area and within said substrate wherein one or more of said vias electrically couples said active device with one or more of said metal layers.

Claims 2 and 7-9 depend on independent Claim 1. Independent Claim 10 is amended herein after a similar fashion.

As amended herein, independent Claims 1 and 10 recite that the dielectric comprises tetraoxysilane (TEOS). This is explained in the original specification, for instance from lines 4-6 at page 5. Using TEOS as a dielectric medium can have fabrication and process advantages over other dielectrics.

Applicants find no teaching or suggestion in Kloen directed towards using TEOS as a dielectric, as recited in the claimed embodiments herein. Thus for at

least this reason, Applicants respectfully assert that Kloen does not teach or suggest the claimed embodiments recited herein.

On the contrary, Kloen expressly teaches use of polyimides. Thus, Applicants respectfully assert that Kloen does not teach, suggest or anticipate the claimed embodiments recited herein that relate to a TEOS based dielectric, teaches away therefrom, and thus provides no motivation to produce these claimed embodiments. Therefore, Applicants respectfully assert that Claims 1-6 and 10 are allowable over the cited reference under 35 USC § 103(a).

CONCLUSION

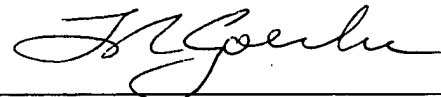
By the rationale set forth above, Applicants respectfully assert that Claims 1-6 and 10 are allowable over the cited reference under 35 USC § 103(a). Accordingly, Applicants respectfully request that the rejection of Claims 1-6 and 10 under 35 USC § 103(a) be withdrawn and that Claims 1-6 and 10 be allowed. The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge our deposit account No. 23-0085, for any unpaid fees.

Respectfully submitted,

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